

Wildlife Workgroup
7 March 2002

WorkGroup Participants:

Facilitator: Scott Bell, CATO

Leader: Scott Bates, CUE Wildlife Biologist

Members: Allan O'Connel, USGS
Jennifer Lee, Prince William Forest Park

Purpose:

Develop a long-term monitoring plan of vertebrates in the National Parks of the National Capital Region to ensure to preserve and enhance the park's most important natural resources.

Outcomes:

As a result of the meeting, we will:

- (1) develop a draft list of stressors, sources, and their ecological effects to vertebrate populations within the National Parks of the National Capital Region
- (2) identify the severity of each threat
- (3) begin to identify potential vital signs to monitor vertebrates.

Discussion

See table below for details.

Next steps

Jennifer Lee is working on a draft chart for herps, Allan is working on mammals, and Scott Bell is working on fish. At the 23 May meeting – the group will integrate their individual efforts and discuss ways to prioritize for monitoring.

<i>Resource Component</i>	<i>Stressor</i>	<i>Sources</i>	<i>Ecological Effects</i>	<i>Severity of Threat (High – Medium – Low - Unknown)</i>	<i>Indicator/Vital Sign</i>
FIDS, Grassland Birds, Raptors	Habitat fragmentation and habitat loss	Development; management practices	Habitat loss	High – Medium	
Fids, Grassland birds, raptors, colonial waterbirds, and waterfowl	Contaminants	Residential pesticides, Roads (salts and petro. Spills), industrial air pollution, water management practices	Increased mortality, decreased diversity, decreased reproductive rates, malformations	High – Medium	
Fids and Grassland birds	Development (cell towers, housing development, roads)	Landuse and landscape changes	Habitat loss, fragmentation, increased mortality	High	
Fids, Grassland birds, raptors, colonial waterbirds, and waterfowl	Climatic variation	Global warming, El Nino/La Nina	Habitat variation, change in food supply,	High – Low	
Fids, Grassland birds, raptors, colonial waterbirds, and waterfowl	Exotic and Invasive species	Urbanization; Transportation mechanisms (human, bird, air, water)	Habitat loss, decreased diversity, increased mortality, increased competition	Medium	
Fids	Deer	Development and landscape changes	Decreased diversity, change or loss of habitat	High	
Fids,	Predators	Human introduction	Mortality, decreased diversity	High –	

Grassland birds, colonial waterbirds, and waterfowl		and landscape changes		Medium	
Fids, Grassland birds, and waterfowl	Avian diseases	Exotics and population overcrowding	Mortality, decreased diversity	Unknown	
Fids, Grassland birds, raptors	Succession	Natural processes	Habitat variation, change in food supply	Low	
Fish	Chemical Contaminants	Industry/human development	water chemistry changes, decreased DO, habitat loss, increased disease, decreased reproduction, loss of diversity	H	Changes in water chemistry, pollution monitoring
Fish	Exotic Introduction	Commercial and Noncommercial	Habitat loss, decreased reproduction, loss of diversity	L	Decrease native populations, increase of exotic populations
Fish	Competitor Introduction	Humans, habitat changes	Habitat loss, decreased reproduction, loss of diversity	L	Decrease native populations, increase of exotic populations
Fish	Change in levels of fishing	Humans	Population decrease, loss of diversity and viability (genetic)	M	Decrease native populations, increase/decrease catch limits
Fish	Increased disease levels	Contaminants	Population decrease, loss of diversity, loss of population viability	M	increased levels of fish kill, increased occurrences of disease indicators in fish
Fish	Habitat degradation	Industry/human development	Sedimentation, habitat loss or change, loss of diversity, population changes	M	Vegatation/water quality monitoring, changes in habitat makeup (loss of grasses, etc)
Fish	Fisheries Mgmt policies	Humans	population changes, loss of diversity, overfishing the resource	M	Monitor new legislation

[illegible]